May 3, 1999

The Honorable Edward J. Markey
United States House of Representatives
Washington, D.C. 20515-2107

Dear Congressman Markey:

Thank you for your letter of March 10, 1999, in which you made four specific suggestions for additional Nuclear Regulatory Commission (NRC) actions on Y2K oversight and asked me to respond to six questions concerning Y2K issues at commercial nuclear power plants. One of your suggestions was that the NRC take more aggressive action in addressing the Y2K issue.

By way of background information, I am pleased to tell you that over the past several years the NRC staff has been working with our licensees and continues to maintain an appropriately aggressive regulatory framework for overseeing Y2K readiness efforts at all nuclear power plants. Your letter acknowledged several of NRC's initiatives in this area. These activities, as summarized below, provide an integrated and comprehensive approach for addressing this issue.

Since 1996, the NRC has been working with nuclear industry organizations and licensees to address the Y2K issue. To ensure that senior-level management at operating U.S. nuclear facilities was aware of the Y2K concern, the NRC issued Information Notice (IN) 96-70, "Year 2000 Effect on Computer System Software," on December 24, 1996. IN 96-70 describes the potential problems that nuclear facility computer systems and software might encounter during the transition to the new century. All U.S. nuclear power plants, fuel cycle facilities, and other material licensees were sent copies of this document.

In 1997, the Nuclear Energy Institute (NEI) agreed to take the lead in developing industry-wide guidance for addressing the Y2K issues at nuclear power reactors. In November 1997, NEI issued a guidance document to all U.S. nuclear power plant licensees, titled "Nuclear Utility Year 2000 Readiness" (NEI/NUSMG 97-07).

In Generic Letter (GL) 98-01, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants," May 11, 1998, the NRC accepted the NEI/NUSMG 97-07 guidance as an appropriate program for nuclear power plant readiness and required that all operating U.S. nuclear power plant licensees submit written responses regarding their facility-specific Y2K readiness programs in order to obtain confirmation that licensees are addressing Y2K issues effectively. All licensees have responded to GL 98-01 stating that they have adopted plant-specific programs that are intended to make the plants Y2K ready by July 1, 1999. GL 98-01 also requires a written response, no later than July 1, 1999, confirming that these facilities are Y2K ready. Licensees who are not Y2K ready by July 1, 1999, must submit a status report and a schedule for the remaining work to ensure timely Y2K readiness.

One of a number of initiatives undertaken by the NRC staff to address the Y2K issue was the conduct of 12 sample audits of licensee Y2K readiness programs. The NRC staff determined that this approach was an appropriate means of oversight of licensee Y2K readiness efforts because all licensees had committed to the nuclear power industry Y2K readiness guidance (NEI/NUSMG 97-07) in their first response to NRC GL 98-01 and because the NRC staff had not identified any Y2K problems in safety-related actuation systems. The sample of 12 licensees included large utilities such as Commonwealth Edison and Tennessee Valley Authority (TVA) as well as small single-unit licensees such as North Atlantic Energy (Seabrook) and Wolf Creek Nuclear Operating Corporation. Because licensee Y2K programs are corporate-wide, many of the NRC staff audits included more than a single nuclear power plant site since many utilities own more than one nuclear power plant. In all, a total of 42 of 103 operating nuclear power plant units were associated with the Y2K readiness program audits of 12 utilities. The NRC staff selected a variety of types of plants of different ages and locations in this sample in order to obtain the necessary assurance that nuclear power industry Y2K readiness programs are being effectively implemented and that licensees are on schedule to meet the readiness target date of July 1, 1999, established in GL 98-01.

In late January 1999, we completed the 12 audits. On the basis of the audit findings, we concluded that the audited licensees were effectively addressing Y2K issues and were undertaking the actions necessary to achieve Y2K readiness in accordance with the GL 98-01 target date. We did not identify any issues that would preclude these licensees from achieving readiness. These findings are consistent with those recently reported by the Department of Energy in the report prepared by the North American Electric Reliability Council on the status of Y2K readiness of the electric power grid.

The NRC staff is not aware of any Y2K problems in nuclear power plant systems that directly impact actuation of safety functions. The majority of commercial nuclear power plants have protection systems that are analog rather than digital. Because Y2K concerns are associated with digital systems, analog reactor protection system functions are not impacted by the Y2K issue. Errors such as incorrect dates in printouts, logs, or displays have been identified by licensees in safety-related devices, but the errors do not affect the functions performed by the devices or systems. Most Y2K issues are in balance-of-plant and other systems such as personnel access controls and plant monitoring systems, which support day-to-day plant operation but have no direct functions necessary for safe operation of the reactor. These systems are being addressed in the licensee Y2K readiness programs consistent with the industry guidance and GL 98-01 schedule.

We have noted from the completed audits that licensee Y2K contingency planning efforts have not progressed far enough for a complete NRC staff review, and, therefore, additional oversight of this area is planned for the spring of 1999. The NRC staff currently plans to audit the contingency planning efforts of six different licensees from those included in the initial 12-sample Y2K readiness audits, beginning in May 1999 and ending in June 1999. As stated earlier, licensee Y2K programs are corporate-wide and many utilities own more than one nuclear power plant. Therefore, a total of 18 operating nuclear power plant units will be associated with these six licensee audits. These audits will focus on the licensee's approach to addressing both internal and external Y2K risks to safe plant operations based on the guidance in NEI/NUSMG 98-07, "Nuclear Utility Year 2000 Contingency Planning."

In addition to the NRC staff activities addressed above, NRC inspectors will review plant-specific Y2K program implementation activities at all nuclear power plant facilities. The inspectors will be using guidance prepared by the NRC headquarters staff that conducted the 12 sample audits. Staff reviews will address licensee Y2K activities dealing with emergency power supplies and plant security systems.

I note in your letter that you refer to the NRC audit of the Seabrook plant, which was conducted in September 1998, as an example of your concerns on Y2K readiness. However, the extensive catalogue of 1304 items that were identified and evaluated for potential Y2K issues by the licensee is an indication that the Seabrook Station has developed a credible and comprehensive Y2K program. Of those items, more than half were found to be fine as is (no modifications needed). Of those items remaining, most are business systems and business hardware, such as personal computers, word processors, payroll systems, and accounting systems. The remaining few items are plant equipment and systems that have undergone extensive testing, analysis, industry review, and minor modifications as needed. From the 12 items that the licensee classified as "safety implication" items, 7 are acceptable and need no remediation, 4 will require modifications, and only 1 will need to be replaced. Moreover, Seabrook Station has determined that there are no Y2K issues that will affect the safe operation of the power plant, and all testing and validation of plant systems are scheduled to be completed by July 1, 1999. I have received your letter of April 5, 1999, regarding Seabrook emergency diesel generator relay failures and will respond to this issue separately.

Similarly, you expressed concern about the Y2K bugs that became apparent during Y2K testing of plant monitoring computers at the Peach Bottom plant. While the Peach Bottom event was a result of human error during Y2K testing, I point out that identification, testing, remediation, and validation are essential elements of well-implemented Y2K readiness programs. Because all power reactor licensees have committed to follow a Y2K readiness program similar to the one proposed by industry and endorsed by NRC, we have confidence that all licensee programs will similarly identify and correct such issues if they exist.

Additionally, you are concerned about possible Y2K bugs in plant security computers. These possible Y2K problems are addressed in GL 98-01 and covered by the previously discussed Y2K readiness program and industry guidance. Furthermore, the NRC has been monitoring the status of licensee Y2K efforts for security-related systems since mid-1997. The information supplied by many of the licensees indicates that their security computers will require remediation. The NRC expects that most licensees will meet the GL 98-01 date of July 1999 with the remainder providing their completion status by that same date. Security computers were reviewed in several of our site-specific audits, which confirm that licensees are thoroughly addressing the Y2K security issues. The readiness of plant security computers is reviewed against applicable regulations, the Y2K readiness program, and industry guidance. Finally, we have addressed your comments on the Pilgrim plant diesel generator issues in our enclosed response to question 3.
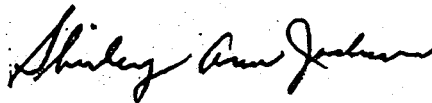
The NRC staff will continue its oversight of Y2K issues at nuclear power plants through the remainder of 1999 and throughout 2000. In July 1999, we will review all licensee responses to GL 98-01 and address any questions that may raise concerns. By September 1999, we will determine the need for issuing orders to address Y2K readiness issues, including, if warranted,

shutdown of a plant. At this time, we believe that all licensees will be able to operate their plants safely during the transition from 1999 to 2000 and beyond and do not believe that significant plant-specific action directed by the NRC to address possible Y2K problems is likely to be needed.

Nevertheless, the nuclear utility industry and the NRC are developing comprehensive contingency plans to cope with any unanticipated problems should they arise on December 31, 1999. This approach is consistent with the defense-in-depth philosophy applied to assuring nuclear safety. The NRC staff addresses your specific suggestions and questions individually in the enclosure.

The Commission remains committed to ensuring that the NRC does what is necessary in its oversight of nuclear power plant licensee Y2K readiness efforts in order to assure safe operation of these facilities throughout 1999, 2000, and beyond. Please contact me if you have any additional questions on this matter.

Sincerely,

Shirley Ann Jackson

Enclosure: Staff Responses

**Staff Responses to Congressman Markey's Suggestions
And Questions on Year 2000 Problem**

<u>The NRC staff has addressed the four suggestions in your letter as follows:</u>

Suggestion 1:   Require additional licensee testing, reporting, and auditing.

Staff response: In Generic Letter (GL) 98-01, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants," May 11, 1998, the NRC accepted the NEI/NUSMG 97-07 guidance as an appropriate program for nuclear power plant readiness and required that all licensees of operating U.S. nuclear power plants submit written responses regarding their facility-specific Y2K readiness programs in order to obtain confirmation that licensees are addressing Y2K issues effectively. The regulatory considerations specified in NEI/NUSMG 97-07 include the performance of appropriate reviews, reporting requirements, and documentation. Documentation of Y2K program activities and results includes documentation requirements, project management documentation, vendor documentation, inventory lists, checklists for initial and detailed assessments, and record retention. NEI/NUSMG 97-07 also addresses testing and contains examples of various plans and checklists as appendices, which may be used or modified to meet the licensee-specific needs and/or requirements.

Regarding the reporting schedule, all licensees have responded to GL 98-01 stating that they have adopted plant-specific programs that are intended to make the plants Y2K ready by July 1, 1999. Furthermore, GL 98-01 requires a written response, no later than July 1, 1999, confirming that these facilities are Y2K ready. Licensees who are not Y2K ready by July 1, 1999, must submit a status report and a schedule for the remaining work to ensure timely Y2K readiness. We have concluded that this reporting schedule will provide the NRC sufficient time to take any additional regulatory actions that may be necessary.

The issue of having licensees inventory all Y2K-susceptible systems has been addressed in GL 98-01, Supplement 1, "Year 2000 Readiness of Computer Systems at Nuclear Power Plants," January 14, 1999, which requests that licensees submit information on the overall Y2K readiness of the plant, including those systems necessary for continued plant operation which are not covered by the terms and conditions of the license and NRC regulations. The licensees have already committed to inventory all Y2K-susceptible systems, including a systematic assessment and analysis of the initial inventory of all potentially affected items. This has been done according to the guidance in NEI/NUSMG 97-07. With regard to testing, on the basis of the 12-plant audits, we believe that all utilities have committed to and appear to be executing a rigorous test program, where necessary, of computer systems and embedded systems and components in accordance with the guidance in

NEI/NUSMG 97-07. Reports are submitted regularly to the corporate sponsors and assigned management personnel regarding progress and milestones that are being met. The implementation of licensee testing programs will be further assessed as part of NRC's reviews of Y2K activities at all reactor sites.

In summary, we have found that nuclear power plant licensees are giving high priority to Y2K issues. Our audits have shown that the appropriate industry resources are being allocated to the resolution of potential Y2K problems and that appropriate progress is being made. In addition to the NRC audits, many peer group audits and assessments are being conducted by industry-related entities which similarly are reporting good progress. NRC inspectors will also be reviewing plant-specific Y2K program implementation activities at all nuclear power plant facilities.

Suggestion 2:	Require adequate backup electricity systems.
Staff response:	Adequate back-up emergency power systems are already required at nuclear power plants. Emergency onsite power is usually provided by diesel generators, which supply electric power to the plant safety systems upon a loss of all offsite power from the external power grid. NRC regulations require that the onsite electric power supplies and onsite electric distribution system shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure. By design, normally, a single emergency diesel generator with its dedicated set of safety system equipment is capable of safely shutting down the reactor and maintaining it in a safe condition. The operation and maintenance of the emergency diesel generators and the other safety-related equipment necessary for the safe shutdown of the reactor are controlled by the plant technical specifications (TSs). Plant TSs require the emergency diesel generators to be tested routinely in order to demonstrate their operability and capability of supplying power as needed. This test ensures a high level of readiness and reliability. The plant TSs also require that immediate action be taken to restore the diesel generators to operable status if they are found inoperable. Therefore, although occasional problems have been reported with backup diesel generators, the staff concludes that onsite power provided by diesel generators is a reliable source of emergency power in the case of a loss of offsite power.

In accordance with their license conditions, all licensees are required to have all backup electricity sources available regardless of Y2K dates. The scope of the licensees' Y2K programs, including contingency planning, covers the emergency onsite power and other emergency power systems at the plant. All licensees must have an adequate inventory of fuel sufficient to enable each of the diesel generators to power required safety loads for a period of 7 days following any design-basis accident and loss of offsite power. NRC audit results to date have

verified the licensees' consideration of these systems, and no associated residual Y2K issues relating to the emergency power generation system have been identified. In addition, for the Y2K concern, licensee preparations will include contingency plans to ensure prompt response to Y2K-related issues that might arise — one of which is the loss or degradation of offsite power.

Suggestion 3:   Shut down unsafe plants.

Staff response: In the face of the Y2K issue, the NRC recognizes the importance of the nuclear power plants to support the electric grid and the nation's electric power infrastructure. However, licensees are required to operate their facilities safely in compliance with NRC's regulations and specific conditions of facility licenses. When a licensee fails to comply, the staff takes action to bring about compliance with NRC regulations and requirements. In some instances of noncompliance with specific license conditions, however, circumstances may arise in which the NRC believes that enforcement action is not appropriate, even though, technically, a noncompliance situation may exist. In these cases, the NRC has the authority to exercise discretion to permit continued operations — despite the existence of a noncompliance — where the noncompliance does not, in the particular circumstances, pose an undue risk to public health and safety. This provision is necessary because it is difficult to anticipate every contingency that might arise during the lifetime of a facility. This is recognized in the NRC's enforcement policy, which permits the NRC, at its discretion, either to defer or refrain from enforcement action under certain limited circumstances. But even with these guidelines, plant safety is still the main consideration. Where needed to ensure adequate protection of public health and safety, the NRC may demand immediate licensee action, up to and including a shutdown or cessation of licensed activities.

The staff is still developing contingency plans and enforcement discretion guidelines for rollover dates as they relate to the Y2K issues. When the Y2K enforcement discretion guidance is finalized, it will be sent to the Commission for approval. At this time, we believe all licensees will be able to operate their plants safely during the transition from 1999 to 2000, and do not believe significant plant-specific action directed by NRC is likely to be needed. However, should the NRC identify a situation in which the Y2K issue results in a plant being in noncompliance with its license or NRC regulations, appropriate regulatory action will be taken. By September 1999, the NRC will determine the need for issuing orders to nuclear power plant licensees to address Y2K readiness issues including, if warranted, shutting down a plant.

Suggestion 4:   Assist Russia and other nations with severe Y2K problems.

Staff response: NRC assistance to the countries of the former Soviet Union and Eastern Europe which operate Soviet-designed reactors is through the International Atomic Energy Agency (IAEA). The IAEA is coordinating Y2K information about nuclear power plants worldwide. Additional information on the IAEA's Y2K activities can be found on IAEA's website at: <www.iaea.or.at>. In preparation for the 42nd IAEA General Conference in September 1998, the NRC took the lead in drafting a resolution on the year 2000 (Y2K) readiness for the safety of nuclear power plants, fuel cycle facilities, and other enterprises using radioactive materials. That resolution urged, among other things, that member states submit information to the IAEA on activities underway to inventory and remediate Y2K problems at their nuclear facilities, and that the IAEA act as a central coordination point in disseminating information about member state Y2K activities.

During numerous bilateral meetings with countries such as Argentina, Lithuania, Russia, and the Ukraine, the NRC presented the draft resolution and urged their support. Ultimately, 28 member states co-sponsored the resolution, including a number of countries that have nuclear facilities whose safety are of particular concern to the U.S. Government.

Since the General Conference, the NRC has worked with the IAEA to formulate a Y2K program that would address nuclear safety aspects of Y2K issues, particularly those at Soviet-designed reactors in the New Independent States (NIS) and Central and Eastern Europe (CEE). We requested that State Department funds be allocated, under the FY1998 Voluntary Contribution, to fund a cost-free expert (an individual who would work at the IAEA for one year at no cost to the IAEA) to work specifically on Y2K nuclear safety matters in the Department of Nuclear Safety. The United States cost-free expert assumed his post in December 1998, and the Department of Nuclear Safety is now developing and implementing a comprehensive program to help member states address Y2K remediation issues and contingency planning. Although any member state can participate in the Y2K activity, there is a focus on Soviet-designed reactors. NRC continues to work closely with the Department of Nuclear Safety on this program.

The NRC staff response to the six questions in your letter follows:

Question 1:   How will the NRC evaluate a licensee claim to be Y2K ready without a clear definition, detailed description, or actual testing?

Response: In GL 98-01, reference is made to NEI/NUSMG 97-07, "Nuclear Utility Year 2000 Readiness," which describes an approach that all licensees have agreed to utilize in addressing the Y2K issues at their facilities. This guidance document

came out of a joint effort between the Nuclear Energy Institute (NEI) and the Nuclear Utilities Software Management Group (NUSMG) and was accepted by the NRC. As indicated in NEI/NUSMG 97-07, "Y2K compliant" pertains to an accurate processing of date/time data from, into, and between the twentieth and twenty-first century, the years 1999 and 2000, and leap-year calculations. "Y2K ready" pertains to a computer system or application that has been determined to be suitable for continued use into the year 2000 even though the computer system, application, or device is not fully Y2K compliant. The document also provides guidance that addresses the need for detailed descriptions and testing as part of the suggested five-phase approach to ensure that a licensee's plant continues to operate safely and within the requirements of its license and NRC regulations. Resident Inspector reviews at all U.S. power reactor sites will verify that the licensee is implementing a Y2K program that addresses the areas discussed in NEI/NUSMG 97-07. The status of the implementation of these phases and schedules for remaining activities, including planning and coordination of Y2K-related work during currently planned outages, will be considered with the July 1, 1999, response to GL 98-01. In general, the NRC will determine if a licensee is Y2K ready by (1) verifying that the licensee has implemented Y2K program activities, (2) evaluating the progress of the licensee's schedule to achieve Y2K readiness, and (3) assessing the licensee's contingency plans for addressing Y2K-related problems.

Question 2: Is setting the computer clock back to another year, such as 1972, a common method of making systems "Y2K ready," and is it considered an acceptable long-term solution?

Response: Setting the computer clock back to another year is an acceptable solution, however this is not usually chosen as the preferred remediation. In the case cited in your letter, the vendor of the radiation monitoring system was unable to provide a firm schedule or price for the Y2K remediation. A careful analysis of this particular situation indicated that this was both an acceptable and preferred approach for this particular case. Setting the clock back to 1972 is acceptable because the calendar for the next 28 years (1972–2000) will be identical with the calendar for the 28 years following the year 2000. The idea is to set the clock back 28 years, so that the days of the week and the leap year calculations are maintained. Once chosen, this solution need not be used in the long term, but could be upgraded to a Y2K-ready or Y2K-compliant solution at some convenient time after January 1, 2000. Nevertheless, the item would then function properly through rollover to the new millennium.

Question 3: In light of the ongoing problems with the backup diesel generators at the Pilgrim plant, what are the NRC and the Pilgrim plant doing to ensure that multiple backup electricity sources and adequate fuel are available in case of Y2K-related problems at the site or in the Northeastern electricity grid?

Response: As a result of the emergency diesel generator issues, the Pilgrim licensee has proposed technical specifications (TSs) to redefine the onsite emergency diesel fuel oil requirements, has revised the temperature analysis to justify a lower minimum temperature for the emergency diesel generator rooms, and will

complete modifications in the near future to resolve the upper maximum temperature issue by changing the air flow distribution in these rooms. The current TSs require 19,800 gallons of fuel oil per emergency diesel generator. On the basis of a recent reanalysis, Boston Edison Company (BECo) has determined that this TS requirement is insufficient for the conservative operations of both emergency diesels operating simultaneously for seven days at full load. In this regard, BECo is proposing to amend the TSs to require additional onsite diesel fuel oil. The proposed TS amendment is expected to be completed before the Y2K transition. In addition, BECo has been involved with the independent system operator for New England to review industry Y2K compliance efforts. No problems were identified for the Pilgrim station or its switchyard.

In its response to Generic Letter 98-01, BECo will be pursuing a Y2K-readiness program consistent with the one outlined in NEI/NUSMG 97-07, "Nuclear Utility Year 2000 Readiness," and NEI/NUSMG 98-07, "Nuclear Utility Year 2000 Readiness Contingency Planning." NEI/NUSMG 98-07, dated August 1998, builds on Y2K-readiness programs already in place and presents guidance that can be used by plant operating staff to develop effective contingency plans for mitigating the potentially unanticipated effects of a Y2K issue. The guidance incorporates risks to safe plant operation resulting from potential Y2K issues incorporated into the existing emergency procedures and emergency response organization at each nuclear power plant. To a large extent, Y2K issue contingency planning will depend on the specific systems and risks identified as affected by the Y2K issue at the individual plant. However, two generic areas of consideration for contingency planning identified in NEI/NUSMG 98-07 are (1) augmentation of staff and (2) availability of consumables (e.g., emergency diesel generator fuel oil and water chemistry control chemicals).

Question 4: Does the NRC consider reliance upon vendors to certify the Y2K compliance of their own systems to be an adequate response for Y2K-susceptible required plant systems?

Response: In some cases, sole reliance upon vendors to certify the Y2K compliance of their own systems is not considered to be an adequate response for Y2K- susceptible required plant systems. A vendor that asserts that its system or component is Y2K ready or Y2K compliant is required by the licensee to present the bases for its assertion. These bases may be included in the response to an in-depth readiness questionnaire, similar to that found in Appendix D of NEI/NUSMG 97-07, or by other suitable communication. NEI/NUSMG 97-07 (section 5.3.1 "Vendor Evaluation") provides further guidance to the licensee as follows: "For vendor responses that indicate an application or device is Y2K ready or compliant, a decision on whether or not to perform validation testing is required. This decision may be based on the criticality of the item, prior experience with the vendor, the extent of documentation provided, or utility knowledge of the item."

Question 5: Will the Y2K inspections conducted by resident NRC inspectors require complete inventories of Y2K-susceptible software and embedded systems, justification of licensee claims of Y2K readiness, and rigorous testing of Y2K compliance in systems required by regulation? Will Pilgrim receive as exacting a Y2K audit as its neighbor Seabrook? Will the NRC inspectors provide ongoing monitoring of progress toward full Y2K compliance at all plants? What criteria will the NRC use for requiring nuclear plant shutdowns or other action in the case of failure to achieve necessary Y2K readiness before the end of the year?

Response: The NRC is committed to doing whatever is necessary in its oversight of nuclear power plant readiness efforts for these facilities to safely operate through January 1, 2000, and beyond. As such, it has adopted an aggressive approach in working with nuclear power plant licensees (owners/operators) to achieve Y2K readiness. NRC inspectors will review Y2K activities at all 103 nuclear power plants between April and June 30, 1999. During this same time, the NRC staff will also perform an in-depth review of contingency planning efforts at six licensees, different from those in the initial 12 audits. All review findings will be made publicly available and posted on the NRC Y2K website.

Inspectors conducting the Y2K reviews have received special training. Their inspection manual and Y2K audit checklist have been posted on the NRC Internet web page at <http://www.nrc/gov/NRC/NEWS/year2000.html>. NRC inspectors will not be conducting a complete inventory of Y2K-susceptible software and embedded systems, however they will review licensee activities in this area. The NRC reviews will focus on the complete licensee Y2K program and its implementation process. Licensee justifications in claiming Y2K readiness and testing for systems required by regulations will be reviewed by NRC inspectors.

While Pilgrim was not one of the 12 original audits performed, Pilgrim and other licensees will benefit from the lessons-learned from the previous 12 audits. Both licensees for Pilgrim and Seabrook are committed to following the same industry Y2K guidelines. The 12 in-depth NRC audits already performed, including that at Seabrook, confirmed the effectiveness of these guidelines and the NRC review at Pilgrim will assess the licensee program for implementation of the industry guidelines. Therefore, NRC inspectors conducting the audit at Pilgrim will have the added benefit of incorporating lessons learned from previous audits which will result in the same high confidence level that both Pilgrim and Seabrook will be Y2K ready. Awareness of progress toward full Y2K compliance at all plants will be maintained through the resident staff.

The NRC staff will continue its oversight of Y2K issues at nuclear power plants through the remainder of 1999. GL 98-01 requires that all nuclear power plants report their Y2K readiness by July 1, 1999. In July 1999, we will immediately review all licensee responses to GL 98-01 and address any issues that may raise concern. Should the NRC identify a situation in which the Y2K issues result in a plant being in noncompliance with its license or NRC regulations, appropriate regulatory action will be taken. Therefore, by September 1999, the NRC will determine the need for issuing orders to address Y2K readiness issues,

including, if warranted, shutdown of a plant. However, at this time, we believe all licensees will be able to operate their plants safely during the transition from 1999 to 2000, and do not believe significant plant-specific action directed by NRC is likely to be needed.

Question 6:   Why does NRC believe there is a "public health and safety" need to keep nuclear plants running during the Y2K transition? Has the NRC been informed by FERC or NERC that keeping particular nuclear plants running is necessary in order to prevent grid shutdowns? If so, please provide written documentation. Under what conditions would nuclear plants be allowed to operate outside license conditions and for how long?

Response: FERC and NERC have not identified to the NRC the need to keep particular nuclear power plants running during the Y2K transition. However, NERC in their report to DOE, "Preparing the Electric Power Systems of North America For Transition to the Year 2000," dated September 17, 1998, states as follows: "Nuclear generating facilities are expected to be available to supply their share of energy needs and all nuclear safety systems are expected to be fully ready for Y2K." The NRC supports the efforts of the President's Council on Year 2000 Conversion and as a member of the Energy/Electric Power Sector Working Group, we understand the importance not only of maintaining nuclear power plant safety, but of enhancing safe grid operation in the face of the Y2K issue as well. The NRC regulatory oversight and authority does not extend to the U.S. offsite electrical grid system, but we recognize the national importance of having available the broadest range of electrical generating capability in order to cope with any unforseen Y2K impacts should they occur. The NRC regulatory focus on electrical grid reliability is still related primarily to the challenges on plant safety systems that might result from a grid transient, such as a loss of offsite power. The staff's response to suggestion 3 discusses situations where a licensee may be in noncompliance with the Commission's regulations, and staff actions regarding contingency planning and enforcement discretion. The NRC's primary focus remains on safe reactor operations and ensuring public health and safety.